



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,970	06/09/2005	Manabu Iwamoto	590157-2020	6933
7590 Matthew K. Ryan Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151			EXAMINER YAN, REN LUO	
			ART UNIT 2854	PAPER NUMBER
			MAIL DATE 08/08/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/537,970

Applicant(s)

IWAMOTO ET AL.

Examiner

Ren L. Yan

Art Unit

2854

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/22/05, 8/11/06, 7/18/07</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The preamble of claim 18 is directed to a stencil material roll while the body of the claims recites steps of a method of calculating a stencil material roll residue for use in a stencil making system. Thus, claim 18 appears to have improperly mixed two statutory classes as provided in the Statute.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 18-21 are vague and indefinite because the preamble of independent claim 18 is directed to a stencil material roll while the body of the claim recites steps of a method of calculating a stencil material roll residue for use in a stencil making system. Accordingly, the metes and bounds of claim 18 are unclear and the scope of claim 18 can not be ascertained. For purpose of the prosecution, claims 18-21 are treated as being directed to a stencil material roll and only the structure of the stencil material roll is evaluated for patentability.

Art Unit: 2854

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki(6,530,519).

With respect to claims 18 and 21, Suzuki teaches the structure of a stencil material roll 4 as claimed including storage means in the form of memory ICs 7 and 71 which store a total length of the stencil material roll before use. See Figs. 1-4, cl. 2, lines 58-65, cl. 4, lines 55-67, and cl. 9, line 45 through cl. line 25 in Suzuki for details.

With respect to claim 19, the storage means of Suzuki is capable of storing a stencil material roll residue which is obtained by cumulatively subtracting the lengths of the stencils which have been made from the total length of the stencil material roll.

Regarding claim 20, the storage means of Suzuki is capable of storing the sum of the lengths of the stencils which have been made, to be cumulatively subtracted from the total length of the stencil material roll.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 64-018683 in view of Suzuki(6,530,519).

The '683 patent teaches the structure and method of a stencil making system where stencil material unrolled from a stencil material roll is perforated and cut to make a plurality of kinds of stencils having different lengths, which system including the use of variable sizes or kinds of stencil print drums which conform to respective lengths of a plurality of stencils and around which stencils conforming to the respective printing drums in length are wound, wherein storage means (sensor 18 on the print drum unit 17) stores the kinds of the printing drums linked with lengths of the respective stencils to be wound around the printing drums, namely, A3 drum unit corresponding to a stencil cut length 530mm and A4 drum corresponding to a stencil cut length 320mm, drum unit sensing means 40 for communicating with the storage means 18 for determining the kind of stencil print drum mounted on the print drum support and thus the length of the stencil needs to be cut and conveyed during the printing operation, and a controller 41 for controlling the conveying and cutting of the stencil based on the kind of print drum is mounted in the system at any given time. See the abstract and Figs. 1-8 in '683 patent for details.

However, the '683 patent does not teach to monitor the residue amount of the stencil on the stencil roll by calculating the stencil material roll residue in the stencil making system through cumulatively subtracting the lengths of the stencils used from the total length of the stencil material roll stored in the first storage means.

Suzuki teaches in a stencil printer of a similar type the conventionality of providing a stencil roll 4 with memory ICs 7 and 71 as a first storage means which stores a total length of the stencil material roll before use, and a residue calculating means which calculates a stencil

Art Unit: 2854

material roll residue in the stencil making system by reading out from the second storage means (the kind of print drum is known to the controller of the stencil printer) the lengths of the stencils which have been made and cumulatively subtracting the lengths of the stencils used from the total length of the stencil material roll stored in the first storage means. See Figs. 1-4, cl. 2, lines 58-65, cl. 4, lines 55-67, and cl. 9, line 45 through cl. line 25 in Suzuki for example.

It would have been obvious to one of ordinary skill in the art at the time of invention to provide the stencil making system of the '683 patent with the first storage means on the stencil roll for storing a total length of the stencil material roll before use and a residue calculating means appropriately disposed to work with the controller of the stencil making system for calculating the residue amount of stencil remaining in the stencil roll by cumulatively subtracting the lengths of the stencils used from the total length of the stencil material roll stored in the first storage means for the advantage that the stencil roll can be replaced at proper time and the working efficiency of the stencil apparatus can be improved.

With respect to claims 14 and 15, the combination of the '683 patent and Suzuki teaches the use of the second storage means comprises a plurality of storage portions 18 each of which is provided on each of the printing drums to store the length of the stencil to be wound around the printing drum, and the residue calculating means reads out the lengths of the stencils which have been made by reading out length of the stencil stored by the storage portion provided on the printing drum around which the stencil which has been made is wound.

With respect to claim 16, Suzuki teaches the use of a display means (cl. 9, lines 45-54) which displays the number of stencils which can be further made on the basis of the stencil material roll residue calculated by the residue calculating means so as to keep the operator

Art Unit: 2854

informed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ren L Yan  
Primary Examiner  
Art Unit 2854

Ren Yan  
July 30, 2007